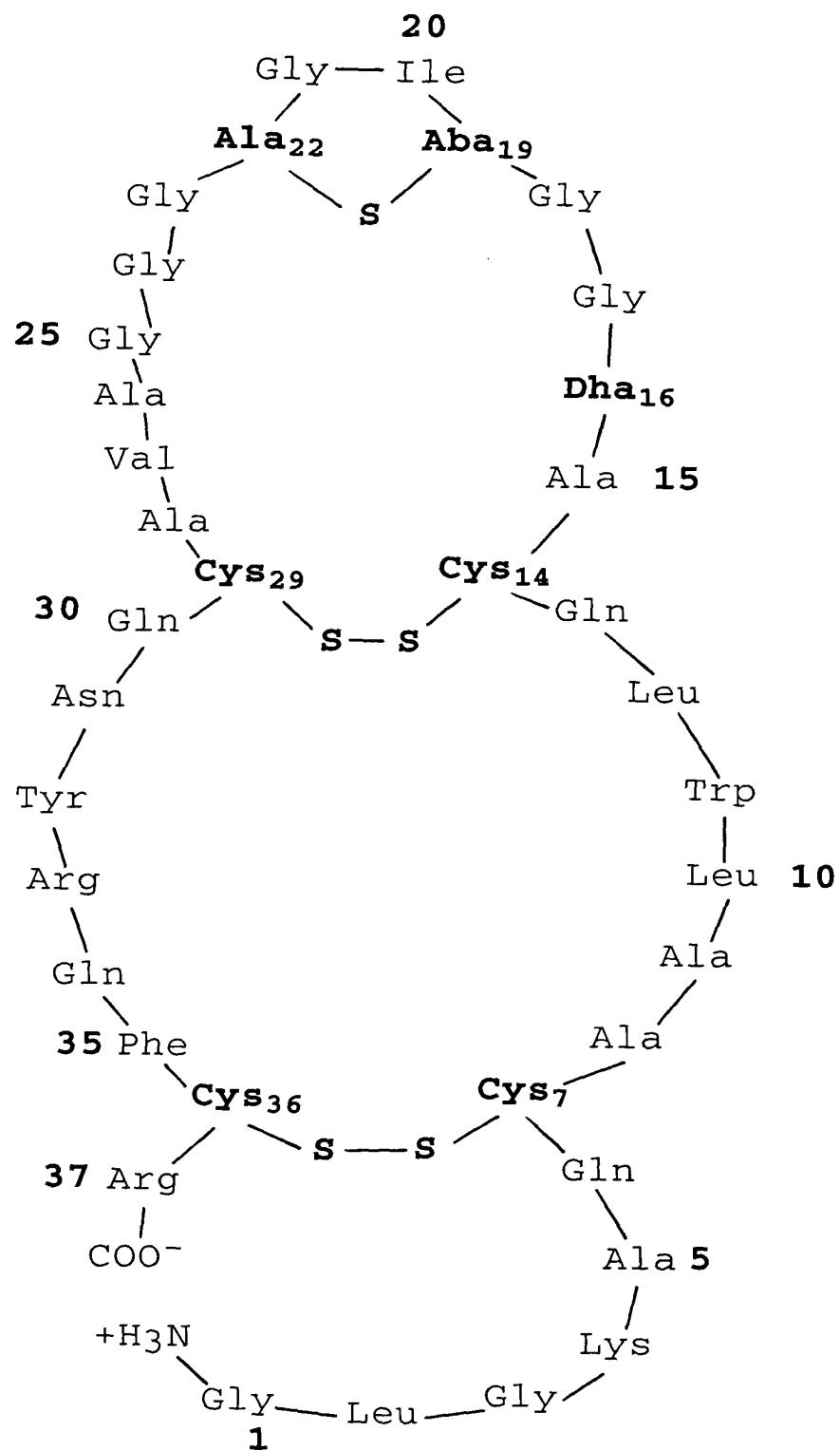
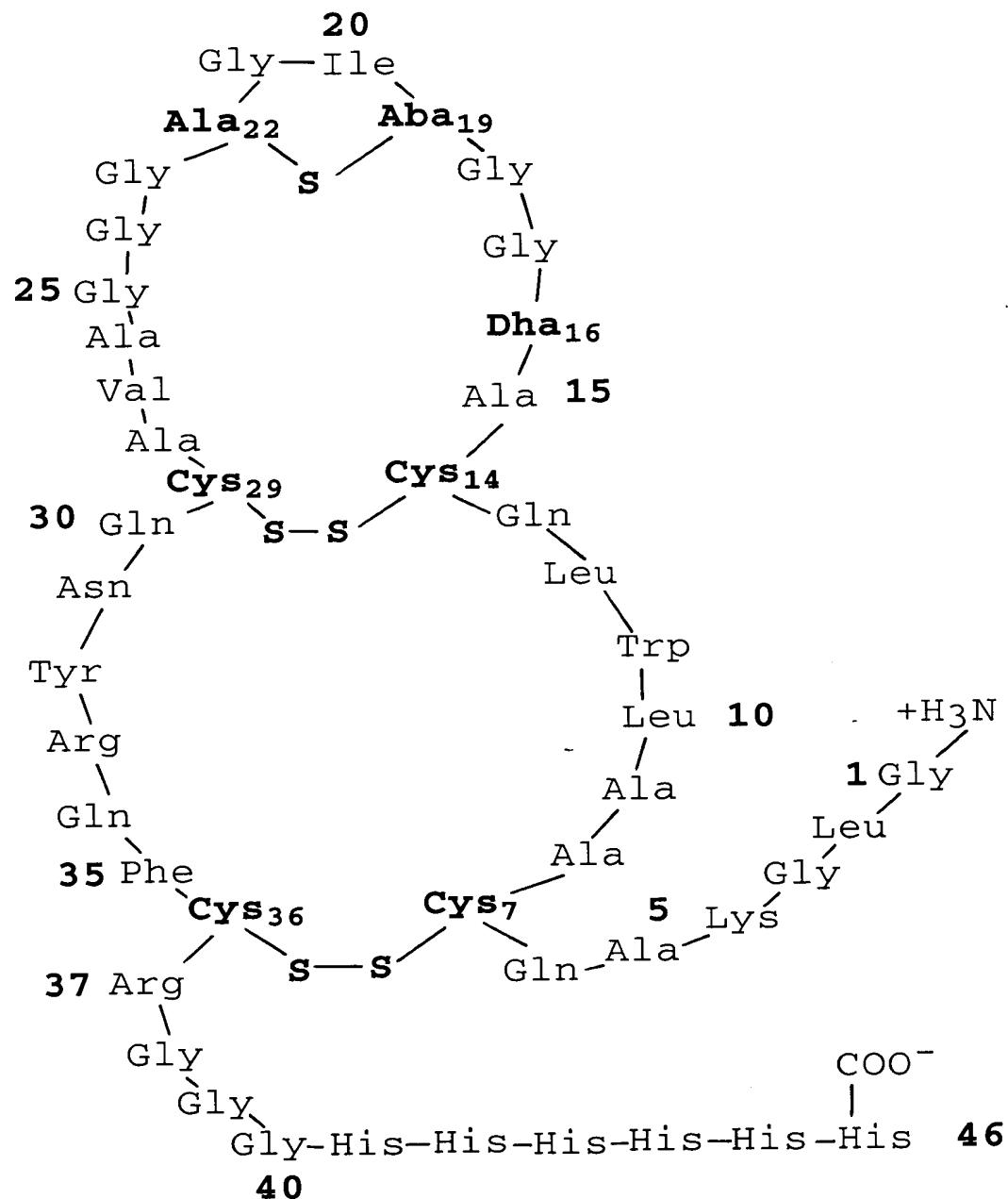


Fig.1



Sublancin 168

Fig.2



Sublancin-His tag

Fig. 3

ECORI

PTZ sequence <---- GAATTCCGGCTCTAAAGCGAT

TCTGAGGAGTTCTTACACCGAGGAACCTGCACTTCAACGAGCTGGATTAAACAGGTGGGCATAAG

AGTTAAGATAATTAAACCTTATAACACATCGCTTAAGTTTGTGTTAAACTTAAAAACAT

GGTAAAATTATAAAACATAAGGAAGACTGATTATGGAATATGTAGTTAGTCTTACATTATTATA

GCACCTTTCTTACTGTTCTTAAACGTTAAGGAGCTGATTATGGAATATGTAGTTAGTCTTACATTATTATA

AATTGGTTATCTAAACAGAAATTCCAAATTAACTCAAATAGTTAGTCTTACATTATTATA

AGTTGCAGATAATTGCAATTGCTTACCCATATGCTAACCAAGATAAGGATAGAATTGTTATTGAAACT

ACAAATAAGCGTTTCAATTGAGGCTCAACATTAACTCAAATTTCAAAAGTATAAAAGGGTTAGTG

TTGGAACATAAAAAGTACCTTCTTACAATTAGGGTACTTTTGTATCTTATAATTAAATTTAC

CTAAATTATTATCATTATTAAATTCAAAATTCATAATTAGTCATTATTAGTGTATTACAAACCAA

Bam HI ( ~900 bp ) Bam HI

TTC GGATCC <---- cat ----> GGATTCGCTGTATTACAAACCAATTCTGTTTATTGATAGTTAAATA

GTTCCTATGATTATGAAACAAAGTTCCCTTATAATTTCAAA

AAAAAATAAAAATATGGTGAATTAGTTAGTCTTCTTATATAAAATGTAATCCGGATTGCAA

| Sublancin leader ----> Xho I

ACAAATGGGAGGTTTACAA **ATGGAAAAGCTATTAAAGCAAGTAAACCTCGAGGAACACTCGAAACCAAA**

| Sun A ---->

**AAGCTAGT GGATTAGGAAAAGCTCAGTGTGCTGGCTACAAATGTCGTTGCTAGTGGCGTACAAATTGG**

| Pst I |

**TTGGGTGGGAGCTGTTGCTTGTCAAAACTATCGTCAATTCTGCAGA** TAAACATTTGTAGAGGGAAAT

ATTAAATATTCCCTCATATTAAAGGGGATTGAAATGAAATAAGAAAATAATGTTCATACTA

AACAGTTAATAGTCATGATTGTGACTAGCTTGTATCTGTCATTAAAGTTCTATAACCTTAACTA

TGGAATTGATTGATTCTACTAGACCTAATTGGGATAAGGGCTTATAGTTAAGAGACTTAATTGTTATT

TTAAGAAGATGGGATAAAACTAGGCCACTTGAATTGCAAGAAAATAAGACATTCGAAGCCCTAAAC

AAATAAGCTCCCTGTATAGCTTGTGATAAGGGAGGAATATGGACATTACATAACAAATATAACGAAAT

TAGAAAATAACTATTACTTGTAGTGTGATCCTGATAAGACAAAATAACTAAATAAAAAGGGATT

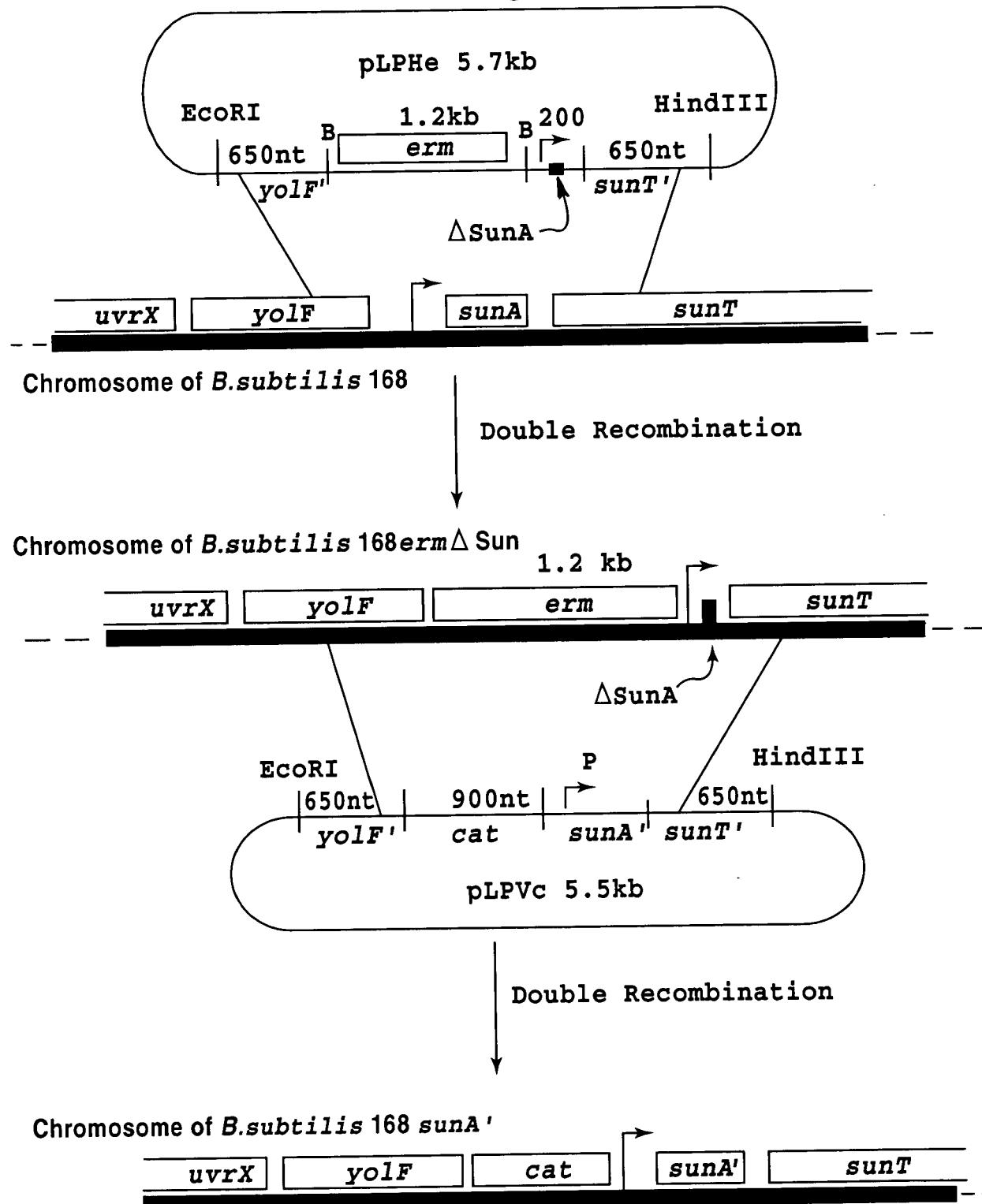
GAAAGTAATTCAAAACTTATAATTAGAAATTGACATACCTTTAGAAATTTAGGACATACCTTTAGAAAT

AAAACATTTACTTGTGGGTCTTGTGAAGCTT----->ptZ sequence

Hind III

Fig.4

09890403040502



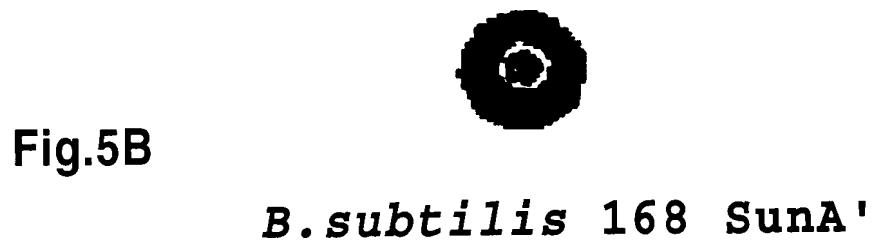
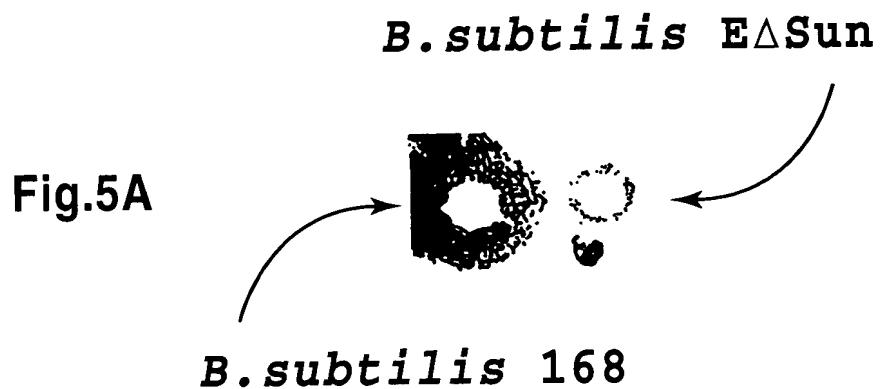


Fig.6

**pLPcat**

TTGCAAACAAATGGGGAGGTTTACAA **ATGGAAAAGCTATTAAAGAAG**  
MetGluLysIleuPheLysGluV

**XbaI**

**TTAAACTCGAGGA**ACTCGAAAACCAAAAAGGTAGT **GGATTAGGAAAAGC**  
AlLysLeuGluGluLeuGluAsnGluLysGlySer GlyLeuGlyLysAl

**tide →**

TCAGTGTGCTGCGTTGTGGCTACAATGTGCTAGTGGCGGTACAATTGGTT  
aGlnCysAlaAlaLeuTrpLeuGlnCysAlaSerGlyGlyThrIleGlyC

**KasI**

GTGGTGGCGGCCGTTGCTTGTCAAAACTATCGTCAATTCTGTAGAGGT  
ysGlyGlyGlyAlaValAlaCysGlnAsnTyrArgGlnPheCysArgGly

**His Tag →**

**Stop**

**PstI**

GGTGGTCATCATCATCATCATCATTAGAGTCCTGCAGATAAAACA  
GlyGlyHisHisHisHisHis \* **pLPcat →**